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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 13

Application Number: 09/470,554 Filing Date: December 22, 1999 Appellant(s): KERPELMAN ET AL.

MAILED

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**GROUP 3600** 

Patrick S. Yoder For Appellant

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed 9/23/03.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

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**'**, . ,

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

#### (7) Grouping of Claims

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because it appears from the claims and appellant's arguments that the claims are not patentably distinct from one another and will not stand or fall independently of one another. In the brief, Appellant indicates the following grouping: 1) claim 1 and dependent claims 2-13 and 15 will stand or fall together, 2) claim 16 and dependent claims 17-24 will stand or fall together, 3) claim 25 and dependent claims 26-32 will stand or fall together and 4) claim 14 will stand or fall together. However, Appellant fails to provide separate explanation as to why each of the above groups are separately patentably and independent of one another. As such, it appears to the Examiner that the grouping of claims based on Appellants given arguments should be: 1)

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claims 1-13 and 15-32 will stand or fall together and 2) claim 14 will stand or fall together. See MPEP 1206.

#### (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (9) Prior Art of Record

6,260,021 Wong et al. 7-2001

5,867,821 Ballantyne et al. 2-1999

#### (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-13 and 15-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No 6,260,021 to Wong et al. in view of U.S. Patent No. 5,867,821 to Ballantyne et al.

As per claim 1, Wong et al. teaches a method, for providing service data to medical diagnostic systems, the method comprising the steps of:

(a)--the claimed generating a diagnostic system service request for a designated diagnostic system coupled to an internal network of a medical diagnostic facility is met by the

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software used to process data and requests to the Picture Archival Communication (PAC) and Radiology (RI) system over the Internet/Internet (36, Fig. 1) (see: column 3, lines 30-40), and

(b)--the claimed transmitting the request over an external network via a data communication control system coupled to a plurality of diagnostic systems over the internal network is met by the transmitting of received medical images request from network-attached (Internet/Internet 36, Fig. 1) clients workstation (38, Fig. 1) (see: column 3, lines 61 to column 4, lines 15).

Wong et al. teaches a medical image distribution system using a medical image server (12, Fig. 1) and a plurality of network-attached (36, Fig. 1) client workstation (38, Fig. 1) for receiving and transferring medical images (see: column 3, lines 61 to column 4, lines 15). Wong et al. further teaches that the network-attached client workstation are configured with an objectoriented graphical interface for receiving medical image requests from a user and transmitting the requested medical image object to the requesting graphical interface (see: column 3, lines 61 to column 4, lines 15). Additionally, Wong et al. teaches a client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to request and view medical image. The client systems are linked via network links (36, Fig. 1) to medical image server (12, Fig. 1) and links (36, Fig. 1) implement the TCP/IP suite of protocols, and accordingly, can be a campus intranet, a wide-area intranet, or even the Internet (see: column 8, lines 53-64). This suggests via the Internet and TCP/IP protocols, that receiving and processing medical image requests at a remote service provider as well as transmitting a response from the remote service provider in response to the request at a remote service provider is a result of using the system as described above.

Wong fails to explicitly teaches:

(b)--the claimed data communication control system coupled to a plurality of diagnostic systems;

- (c)--the claimed receiving and processing the request at the remote service provider; and
- (d)--the claimed transmitting a response from the remote service provider in response to the request.

Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces with the Hospital information network through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include the communication controller as taught by Ballantyne et al. within the medical image distribution system as taught by Wong et al. with motivation of assisting the user with processing a service request, thereby providing a simpler and quicker way to access desired data over a network.

As per claim 2, Ballantyne et al. teaches the claimed response is transmitted to the data communications control system. This feature is met by the communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the internal network and the Hospital information network (see: column 5, lines 6-23).

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As per claim 3, Wong et al. teaches the claimed step of transmitting the response to the designated diagnostic system via the internal network. This limitation is met by CORBA Image Interface Engine ("CIIE") that interfaces between the PAC system and medical image server (12, Fig. 1) through the Internet/Internet including the capabilities of transmitting client images requests or responses (see: column 7, lines 38-51).

As per claim 4, Wong et al. teaches the claimed diagnostic system service request is generated at the designated diagnostic system. This feature is met by the network-attached client workstations configured with object-oriented graphical interface for receiving medical images requests from a user at a workstation (designated diagnostic system) (see: column 3, lines 61 to column 4, lines 2).

As per claim 5, Wong et al. teaches the network-attached client workstations configured with object-oriented graphical interface for receiving medical images requests from a user (see: column 3, lines 61 to column 4, lines 2).

Wong et al. fails to teach the diagnostic system service request is generated via an interface routine provided on the data communications control system.

Ballantyne et al. teaches the communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the internal network and the Hospital information network (see: column 5, lines 6-23).

The motivation for combining the respective teachings of Wong et al. and Ballantyne et al. are discussed above in the rejection of claim 1, and incorporated herein.

As per claim 6, Wong et al. teaches communications control system is configured to store and execute communications interface routines interactively with the client and the

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communications interface routines include a web browser routine (see: column 3, lines 42-52 and column 3, lines 61 to column 4, lines 15).

As per claim 7, Ballantyne et al. teaches the claimed service request is generated at the data communications control system. This feature is met the communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the internal network and the Hospital information network (see: column 5, lines 6-23).

As per claim 8, Wong et al. teaches the claimed service request includes at least data identifying the designated diagnostic system. This feature is met by the location data components that stores object identifiers and other data defining current physical location and message information regarding service requests from a workstation (30, Fig. 1) (see: column 7, lines 2937 and column 13, lines 45-58).

As per claim 9, Wong et al. teaches the claimed step of accessing operational data from the designated diagnostic system in response to the service request (see: column 2, lines 38-51).

As per claim 10, Wong et al. fails to explicitly teach the claimed service request is transmitted to the remote service provider via a first data communications medium and the response is transmitted to the medical diagnostic facility via a second data communications medium different from the first medium.

However, Wong et al. teaches a medical image distribution system using a medical image server (12, Fig. 1) and a plurality of network (Internet/Internet) -attached (36, Fig. 1) client workstation (38, Fig. 1) for receiving and transferring medical images requests (see: column 3, lines 61 to column 4, lines 15). Additionally, Wong et al. teaches a client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to

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request and view medical image. The client systems are linked via network links (36, Fig. 1) to medical image server (12, Fig. 1) and links (36, Fig. 1) implement the TCP/IP suite of protocols, and accordingly, can be a campus intranet, a wide-area intranet, or even the Internet (see: column 8, lines 53-64). In addition, the Examiner considers the above-mentioned networks and other such networks including wide area network (WAN) and satellite links used for high-speed transmission data as obvious feature of this system.

The obviousness of incorporating such a feature within the system of Wong et al. is as discussed above in the rejection of claim 1, and incorporated herein.

As per claim 11, Wong et al. teaches the claimed first medium includes a wide area network link. This feature is met by the use of the Internet (36, Fig. 1) to transmit users requests. As per claim 12, Wong et al. teaches a medical image distribution system using a medical image server (12, Fig. 1) and a plurality of network (Internet/Intranet) -attached (36, Fig. 1) client workstation (38, Fig. 1) for receiving and transferring medical images requests (see: column 3, lines 61 to column 4, lines 15).

Wong et al. fails to teach the claimed second medium includes a satellite link.

Since, Wong et al. teaches the use of the Internet as a communication medium to receive and transmit medical images requests, the Examiner considers an addition of a satellite link as a second medium an obvious implementation to the system. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include a satellite link as second medium of communication within the medical image distribution system as taught by Wong et al. with motivation of allowing computers to readily exchange information with little error, thereby ensuring the accuracy of information being transmitted over a network.

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As per claim 13, Wong et al. teaches the claimed response is transmitted directly to a diagnostic system (see: column 6, lines 23-38). This feature is met by the one or more computer system configured to transmit a composed medical images object to the requesting graphical interface (see: column 3, lines 61 to column 4, lines 30 and Fig. 1).

As per claim 15, Wong et al. fails to teaches the claimed response includes service data for addressing an operational problem of the designated diagnostic system, and wherein the method includes storing the service data for download to the designated diagnostic system.

Since Wong et al. teaches fault-tolerance architecture used to maintain the overall execution of the system, for example, providing back up servers, object coordinators or interface engines all used to maintain the operation of the system (see: column 12, lines 39-58). One of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate storing responses regarding service data addressing operational problem with diagnostic system within the other maintenance architecture such as fault tolerance as taught by Wong et al. with the motivation of providing service records and information to ensuring the continual operation of the system.

As per claim 16, Wong et al. teaches software used to process data and requests to the Picture Archival Communication (PAC) and Radiology (RI) system over the Intranet/Internet (36, Fig. 1) (see: column 3, lines 30-40). Wong et al. further teaches the transmitting of received medical images request from network-attached (Internet/Intranet 36, Fig. 1) clients workstation (38, Fig. 1) (see: column 3, lines 61 to column 4, lines 15). In addition, Wong et al. also teaches fault-tolerance architecture used to maintain the overall execution of the system, for example, providing back up servers, object coordinators or interface engines all used to maintain the

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operation of the system (see: column 12, lines 39-58). Moreover, Wong et al. teaches a client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to request and view medical image. The client systems are linked via network links (36, Fig. 1) to medical image server (12, Fig. 1) and links (36, Fig. 1) implement the TCP/IP suite of protocols, and accordingly, can be a campus intranet, a wide-area intranet, or even the Internet (see: column 8, lines 53-64). This suggests via the Internet and TCP/IP protocols, that receiving and processing medical image requests at a remote service provider as well as transmitting a response from the remote service provider in response to the request at a remote service provider is a result of using the system as described above.

Wong et al. fails to explicitly teach the claimed processing and transmitting a service response from the remote service provider via a data communications control system. Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces with the Hospital information network through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23).

The motivation for combining the respective teachings of Wong et al. and Ballantyne et al. are discussed above in the rejection of claim 1, and incorporated herein.

As per claim 17, Wong et al. teaches the claimed service request is generated at the designated diagnostic system. This feature is met by the network-attached client workstations configured with object-oriented graphical interface for receiving medical images requests from a

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user at a workstation (designated diagnostic system) (see: column 3, lines 61 to column 4, lines 2).

As per claim 18, Wong et al. teaches the claimed system data is stored at the diagnostic system (see: column 3, lines 52-59).

As per claim 19, Wong et al. teaches a client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to request and view medical image. The client systems are linked via network links (36, Fig. 1) to medical image server (12, Fig. 1) and links (36, Fig. 1) implement the TCP/IP suite of protocols, and accordingly, can be a campus intranet, a wide-area intranet, or even the Internet (see: column 8, lines 5364). This suggests via the Internet and TCP/IP protocols, that receiving and processing medical image requests at a remote service provider as well as transmitting a response from the remote service provider in response to the request at a remote service provider.

Wong et al. fails to teach the claimed the data communications control system.

Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces with the Hospital information network through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23).

The motivation for combining the respective teachings of Wong et al. and Ballantyne et al. are discussed above in the rejection of claim 1, and incorporated herein.

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As per claim 20, Wong et al. teaches the claimed system data is transmitted with the service request (see: column 3, lines 61 and column 4, lines 15).

As per claim 21, Wong et al. teaches the claimed system data is transmitted after the service request and in response to a prompt from the remote service provider. This limitation is met by the client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to request and view medical image. The client systems are linked via network links (36, Fig. 1) to medical image server (12, Fig. 1) and links (36, Fig. 1) implement the TCP/IP suite of protocols, and accordingly, can be a campus intranet, a wide area intranet, or even the Internet (see: column 8, lines 53-64). This suggests via the Internet and TCP/IP protocols, that receiving and processing medical image requests at a remote service provider as well as transmitting a response from the remote service provider in response to a prompt from the remote service provider.

As per claim 22, it is rejected for the same reasons set forth in claim 10.

As per claim 23, Wong et al. teaches the claimed step of forwarding the response to the designated diagnostic system via the internal network. This limitation is met by CORBA Image Interface Engine ("CIIE") that interfaces between the PAC system and medical image server (12, Fig. 1) through the Intranet/Internet with the capabilities to transmit client images requests or responses (see: column 7, lines 38-51).

As per claim 24, Wong et al. teaches the claimed diagnostic systems include at least two imaging systems of different modalities. This limitation is met by the Picture Archival Communication (PAC) and Radiology (RI) system (see: Fig. 1).

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As per claim 25, Wong et al. teaches a system for providing remote service to a plurality of networked medical diagnostic systems, the system comprising:

--the claimed plurality of medical diagnostic systems coupled to an internal network of a medical diagnostic facility, including designated diagnostic system is met by the software used to process data and requests to the Picture Archival Communication (PAC) and Radiology (RI) system over the Intranet/Internet (36, Fig. 1) (see: column 3, lines 30-40).

Wong et al. also teaches a medical image distribution system using a medical image server (12, Fig. 1) and a plurality of network-attached (Internet/Intranet 36, Fig. 1) client workstation (38, Fig. 1) for receiving and transferring medical images (see: column 3, lines 61 to column 4, lines 15).

Wong et al. fails to explicitly teach the claimed data communications control system coupled to the internal network and to an external network.

Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces with the Hospital information network through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23).

The motivation for combining the respective teachings of Wong et al. and Ballantyne et al. are discussed above in the rejection of claim 1, and incorporated herein.

As per claim 26, Wong et al. also teaches a medical image distribution system using a medical image server (12, Fig. 1) and a plurality of network-attached (Internet/Intranet 36, Fig.

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1) client workstation (38, Fig. 1) for receiving and transferring medical images (see: column 3, lines 61 to column 4, lines 15). In addition, Wong et al. teaches a client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to request and view medical image. The client systems are linked via network links (36, Fig. 1) to medical image server (12, Fig. 1) and links (36, Fig. 1) implement the TCP/IP suite of protocols, and accordingly, can be a campus intranet, a wide-area intranet, or even the Internet (see: column 8, lines 53-64). This suggests via the Internet and TCP/IP protocols, that receiving and processing medical image requests at a remote service provider as well as transmitting a response from the remote service provider in response to the request at a remote service provider

Wong et al. fails to teach the claimed the data communications control system.

Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces with the Hospital information network through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23).

The motivation for combining the respective teachings of Wong et al. and Ballantyne et al. are discussed above in the rejection of claim 1, and incorporated herein.

As per claims 27-30, they are rejected for the same reasons set forth in claims 10, 17, 24 and 15 respectively.

As per claim 31, Wong et al. teaches a medical image distribution system using a medical image server (12, Fig. 1) and a plurality of network-attached (Internet/Intranet 36, Fig. 1) client

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workstation (38, Fig. 1) for receiving and transferring medical images as well as disturbing medical images from one or more storage systems (see: column 3, lines 61 to column 4, lines 15).

Wong et al. fails to teach the claimed the data communications control system.

Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces with the Hospital information network through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23).

The motivation for combining the respective teachings of Wong et al. and Ballantyne et al. are discussed above in the rejection of claim l, and incorporated herein.

As per claim 32, Wong et al. teaches a medical image distribution system using a medical image server (12, Fig. 1) and a plurality of network-attached (36, Fig. 1) client workstation (38, Fig. 1) for receiving and transferring medical images (see: column 3, lines 61 to column 4, lines 15). Wong et al. further teaches that the network-attached client workstation are configured with an object-oriented graphical interface for receiving medical image requests from a user and transmitting the requested medical image object to the requesting graphical interface (see: column 3, lines 61 to column 4, lines 15).

Wong et al. fails to teach the claimed the data communications control system.

Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces

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with the Hospital information network through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23).

The motivation for combining the respective teachings of Wong et al. and Ballantyne et al. are discussed above in the rejection of claim 1, and incorporated herein.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No 6,260,021 to Wong et al. in view of U.S. Patent No. 5,867,821 to Ballantyne et al., as applied to claim 1 above, and further in view of Official Notice.

As per claim 14, Wong et al. and Ballantyne et al. fail to teach the claimed steps of placing the service request in a queue, and transmitting the service request in accordance with an established schedule.

It is well known in the computer industry that using a queue to assign and prioritize elements for instance, schedule service requests in the order in which they are received for transmission is old and established in the art. One of ordinary skill in the art at the time the invention was made would have found it obvious to use a queue to schedule service requests within the medical image distribution system as taught by Wong et al. with motivation of arranging a fast and quick way to provide ready available medical images to an authorized user.

## (11) Response to Argument

In the Appeal Brief filed 2 September 2003, Appellant makes the following arguments:

(A) (i) Wong et al. and Ballantyne et al. reference do not disclose a "service request" as recited in claim 1.

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- (ii) Wong et al. and Ballantyne et al. reference do not disclose a "data communication controller" as recited in claim 1.
- (iii) Wong et al. and Ballantyne et al. reference do not disclose or teach "a data communications control system" coupled to a plurality of the diagnostic system over the internal network.
- (iv) The Examiner fails to point to a convincing suggestion or motivation that would lead one skilled in the art to modify the Wong et al. or Ballantyne references proposed.
- (B) (i) Wong et al. and Ballantyne et al. reference do not disclose a "service request" as recited in claim 16.
- (ii) Wong et al. and Ballantyne et al. reference do not disclose a "data communication controller" as recited in claim 16.
- (iii) Wong et al. and Ballantyne et al. reference do not disclose or teach "a data communications control system" coupled to a plurality of the diagnostic system over the internal network of a medical diagnostic facility.
- (iv) Regarding the motivation or suggestion to combine the references, the Examiner does suggest, nor do the cited references support a motivation to make the suggested combination.
- (C) (i) Wong et al. and Ballantyne et al. reference do not disclose a "service request" as recited in claim 25.
- (ii) Wong et al. and Ballantyne et al. reference do not disclose a "data communication controller" as recited in claim 25.

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- (iii) Wong et al. and Ballantyne et al. reference do not disclose or teach "a data communications control system" coupled to a plurality of the diagnostic system over the internal network of a medical diagnostic facility.
- (iv) Regarding the motivation or suggestion to combine the references, the Examiner does suggest, nor do the cited references support a motivation to make the suggested combination.
- (D) Appellant argues that the Tignor et al. reference, used to support the Official Notice taken regarding "placing a service request in a queue, and transmitting the service request in accordance with an established schedule", is unrelated to the medical imaging.

Examiner will address Appellant's arguments in sequence as they appear in the brief.

Response to Arguments (A)(i)-(iv), (B)(i)-(iv) and (C)(i)-(iv):

In response to argument (i), the Examiner respectfully submits that the Appellant relies on a passage from the specification, page 3, line 25 to page 4, line 2, and page 8, lines 10-24, to impart a specific definition to claim language, namely "service request". However, the Examiner respectfully notes that the cited passage relied upon by Applicant is replete with non-committal terms, in particular "The data requests, in a general sense, may include..." and "Service system 62 may also be ...". It is respectfully submitted that such language appears to describe an invention in terms of what the invention may (or may not) be, rather that what it actually IS.

Thus, Appellant's relied upon passage fails to positively and definitely require the specific definition, which Appellant now argues. Furthermore, Examiner directs Appellant to cited passage in particular, page 3, lines 25-31 of the specification that recites "data requests, in a general sense, may include both request for maintenance or servicing of the systems, requests for

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information, requests for documentation, requests for examination of protocols, requests for software upgrades, and so forth". The Wong et al. reference teaches network-attached client workstations configured with object-oriented graphical interface for receiving medical image requests from a user and transmitting the requested medical image object to the requesting graphical interface (see: column 3, lines 61 to column 4, lines 15). Additionally, Wong et al. teaches a client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to request and view medical images (see: column 8, lines 53-64). This broadly describes that a "request for information" is received and transmitted within the Wong sysem.

In response to argument (ii), the Examiner respectfully submits that the Appellant relies on a passage from the specification, page 7, lines13-17, page 10, line 1 to page 11, line 12 and page 11, lines 14-26, to impart a specific definition to claim language, namely "data communication control system or DCCS". However, the Examiner respectfully notes that the cited passage relied upon by Applicant is replete with non-committal terms, in particular "...service or data providers, which may permit the DCCS 40 to optimize...", "The DCCS 40 may also include..." and "additional applications or software routines may preferably be included in the DCCS 40, which may include diagnostic...". It is respectfully submitted that such language appears to describe an invention in terms of what the invention may (or may not) be, rather that what it actually IS. Thus, Applicant's relied upon passage fails to positively and definitely require the specific definition, which Appellant now argues. Furthermore, the reference of Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces

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with the Hospital information network (external network) through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks. Typical communication controllers conduct these functions and are available from vendors such as Scientific Atlanta (see: column 5, lines 6-23). Moreover, Ballantyne teaches that the communication controller (26, Fig. 2) links external sources such as external clinics, other hospitals, medical schools, etc... in order to receive and transmit relevant medical information (see: Fig. 2 and column 6, lines 47-57). The examples and figures of the Ballantyne reference plainly show that the communication controllers are responsible for routing data between an internal network and external network (Hospital information network).

In response to argument (iii), the Examiner respectfully submits the reference of Wong et al. teaches a client system such as system (38, Fig. 1) that presents graphical user interfaces ("GUI") which health-care personal use to request and view medical images (see: column 8, lines 53-64). Furthermore, the network-attached client workstations ("plurality of diagnostic systems") are configured with an object-oriented graphical interface for receiving medical image request form a user and transmitting the requested medical image object to the requesting graphical interface (see: column 3, lines 61 to column 4, lines 15). The Examiner also notes that the features upon which the Appellant relies (i.e., medical diagnostic imaging system are described as being magnetic resonance imaging (MRI) systems 26, computed tomography (CT) system 28 and X-ray system 30, and an ultrasound system 32) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

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specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In addition, the Examiner directs the Appellant to page 5, lines 30-32 of the specification that recites "medical diagnostic systems communicating in accordance with the present technique may include information management systems, workstations, image and data view stations and so forth". This clearly shows that workstations are used to produce useful images based on physics or modalities. Additionally, Wong et al. also teaches that the clients systems are connected via a network links (36, Fig. 1) that implements TCP/IP suite of protocols, and accordingly, can be campus intranet, a wide-area intranet, or even the Internet (see: column 8, lines 53-64). The Examiner would also like to direct the Appellant's attention to Fig. 1 and item referenced by numeral 36, which clearly indicates that the network is not only the Intranet (which is a form of an internal network) but also the Internet (a form of an external network). Furthermore, Ballantyne et al. teaches a method and apparatus for distributing and administering medical services and electronic medical records including an internal network that interfaces with the Hospital information network (external network) through a communication controller (26, Fig. 2) (data communication control system), which is responsible for all data routing information between the two networks (see: column 5, lines 6-23). Ballantyne also teaches that the communication controller (26, Fig. 2) links external sources such as external clinics, other hospitals, medical schools, etc... in order to receive and transmit relevant medical information (see: Fig. 2 and column 6, lines 47-57). The examples and figures of the Ballantyne reference plainly show that the communication controllers are responsible for routing data between an internal network and external network (Hospital information network).

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In response to argument (iv), the Examiner respectfully submits that obviousness is determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685,686 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPO 785,788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPO 143,147 (CCPA 1976). Using this standard, the Examiner respectfully submits that he has at least satisfied the burden of presenting a prima facie case of obviousness, since he has presented evidence of corresponding claim elements in the prior art and has expressly articulated the combinations and the motivations for combinations that fairly suggest Appellant's claimed invention (see paper number 6). In addition, the Examiner respectfully submits that the motivation to combine the applied references is supported by motivation and/or an explanation based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness. As such, it is NOT seen that the Examiner's has failed to provide support for a motivation or suggestion to combine the reference. Rather, it is respectfully submitted that explanation is based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness has been adequately provided by the motivations and reasons indicated by the Examiner, Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter., 4/22/93).

In addition, the Examiner recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modifications. However, although the Examiner agrees that the motivation or suggestion to make modifications must be articulated, it is respectfully contended that there is

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no requirement that the motivation to make modifications must be expressly articulated within the references themselves. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969).

### Response to Argument (D):

In response to the argument (D), the Examiner respectfully submits the Tignor et al. reference is used to provide support for the Official Notice taken concerning what is "well known in the art" with regard the step of "placing the service request in a queue, and transmitting the service request in accordance with an established schedule". The step of using a queue to assign and prioritize elements for instance, scheduling service requests in the order in which they are received is old and established in the art as described by the reference of Tignor et al. Although the Tignor et al. reference is not related to the medical environment, courts have held that even if a patent does not specifically disclose a particular element, said element being within the knowledge of a skilled artisan, the patent taken in combination with that knowledge, would put the artisan in possession of the claimed invention. In re Graves, 36 USPQ 2d 1697 (Fed. Cir. 1995). Furthermore, since the claimed invention is generally directed to computer system within the medical environment, it is respectfully submitted that one having ordinary skill within such a hybrid art is presumed to have knowledge of generic computer systems, as well. As such, the teachings of Tignor et al. are the type of knowledge expected of a skilled artisan at the time of the claimed invention

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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